

ABSTRACT OF THE DISCLOSURE

Disclosed is a process for forming fluidic ink passageways in actuation wafers for novel thermal ink jet printheads. The process comprises the steps of applying a thin coating of a heat-curable, photopatternable epoxy polymer composition to a lower substrate such as a heater wafer, and drying and photopatterning the coating to form a patterned, semi-solid adhesive layer. The layer and supporting substrate are pressed against the surface of a mating ink inlet substrate to bond the layer to the surface of the mating substrate without the need for a separate bonding layer. The present process simplifies and improves the prior known process by replacing the use of a photosensitive resin layer and a separate adhesive bonding layer with a single layer of an epoxy resin composition which is both photosensitive and adhesive, to eliminate the need for applying two separate layers and the concern that said layers have good bonding strength for their wafers and for each other.